Topic: Plasma Neutral Gas Coupling

Project Title:
on-Neutral Coupling in Solar Prominence Structure and Dynamics

PI Name: Holly Gilbert
PI Email: Holly.R.Gilbert@nasa.gov
Affiliation: NASA Goddard Space Flight Center
CO-I(s):
- Judy Karpen (NASA GSFC)
- C Richard DeVore (Naval Research Laboratory)
- Therese A Kucera (NASA GSFC)

Collaborator(s):
- Yong Lin (Institute of Theoretical Astrophysics)
- Nicolas Labrosse (University of Glasgow)
- Spiro K. Antiochos (NASA GSFC)
- Thomas E. Berger (Lockheed Martin Advanced Technology Center)

Project Information:
The proposed work involves extending and testing previous work conducted by Gilbert et al. (2002, 2008) on cross-field diffusion of neutrals in prominences. Additional modeling of ion-neutral interactions in prominence plasma will be conducted, with the objective of understanding how ion-neutral coupling affects formation, structure, dynamics, longevity, and stability of prominences.

Gaining a better understanding of the ion-neutral coupling in prominences will enhance our more general understanding of ion-neutral coupling in a magnetized medium.

ROSES ID: NNH09ZDA001N
Duration: 4 years
Selection Year: 2010
Program Element: Focused Science Topic

Citations:

Summary: no summary

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